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ABSTRACT

A study considered the tasks for beginning readers posed by currently available beginning reading programs. A set of guidelines for evaluating beginning reading texts was identified. According to the model used, such texts should be "engaging, accessible, and generalizable." These guidelines were used to examine the literature components of these influential first-grade reading programs--a Literature-Core (LC), a mixed Literature/Phonics (LP), and a Phonics-Core (PC) program. The study found that (1) all three programs rated favorably on the content portion of the "engagingness" scale, though the LC program rated higher in terms of language and design; (2) none of the texts proved to be very accessible; and (3) all of the programs introduce children to most of the 100 most frequent words in English. Even the very early texts, however, introduce children to a large number of rimes without providing many repetitions of them, which renders the text less generalizable. As a group, these three programs do not attend to text characteristics that are crucial in promoting reading acquisition. If struggling readers are not to be left behind, these issues must be addressed before early reading texts are published and selected. Contains 2 figures, 7 tables of data, and 41 references. Appendix A contains "Text Engagingness Rating Scales"; Appendix B lists the "100 Most Highly Frequent Words in English"; and Appendix C contains the "Description of Decodability Levels." (NKA)

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Literature Anthologies

The Task for First-Grade Readers

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University of Michigan

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CIERA Inquiry 1: Readers and Texts
What are the characteristics of readers and texts that have the greatest influence on early reading? What are the tasks posed to young readers by currently available beginning reading programs?

In this study, Menon and Hiebert consider the tasks for beginning readers posed by currently available beginning reading programs. The authors identified a set of guidelines for evaluating beginning reading texts. According to their model, such texts should be *engaging*, *accessible*, and *generalizable*. Menon and Hiebert used these guidelines to examine the literature components of three influential first-grade reading programs—a Literature-Core (LC), a mixed Literature/Phonics (LP), and a Phonics-Core (PC) program.

Menon and Hiebert found that (a) all three programs rated favorably on the content portion of the engagingness scale, though the LC program rated higher in terms of language and design; (b) none of the texts proved to be very accessible; and (c) all of the programs introduce children to most of the 100 most frequent words in English. However, even the very early texts introduce children to a large number of rimes without providing many repetitions of them, which renders the text less generalizable.

As a group, these three programs do not attend to text characteristics that are crucial in promoting reading acquisition. If struggling readers are not to be left behind, these issues must be addressed before early reading texts are published and selected.

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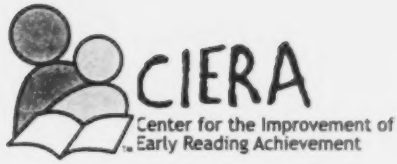

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Literature Anthologies: The Task for First-Grade Readers

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This study is based on the premise that the texts read by beginning readers are influential in determining their reading abilities because of the opportunities they provide for developing independent reading skills. The texts offered for first-grade reading programs have changed substantially over the past two decades (Hiebert, 1997, 1999; Hoffman et al., 1994; McCarthey et al., 1994). The changing nature of beginning reading texts has received relatively little recent research attention. Given texts' core role in reading instruction, this lack of attention is a serious shortcoming in our research agenda. Our thesis is that drastic swings in reading textbooks will inevitably impact reading instruction. Studying texts independent of instruction will not offer us a full understanding of their impact. However, even allowing for great variances in instructional contexts, it should be possible to identify some broad guidelines for evaluating beginning reading texts, based on theoretical and empirical understandings. In this paper, we identify such a set of guidelines and use them to evaluate the texts of three prominent beginning reading programs.

To provide the background for this study, we address the question: "Why are the tasks posed by beginning reading texts important?" The answer to this lies in the difficulty that a substantial number of children are having with the texts of beginning reading programs. Some children have always had difficulties in learning to read, and texts cannot eliminate reading problems or even be held responsible for reading difficulties. However, at a time when the cultural and linguistic backgrounds of children in American classrooms have become increasingly diverse, the texts for beginning readers have become more difficult (Hoffman et al., 1994; Stein et al., 1998).

The first-grade texts belonging to different basal series are used by many (especially beginning) teachers (Shannon, 1997). Therefore, if schools/districts have chosen to buy particular programs, it is likely that the texts belonging to these programs make up the primary materials available to teachers. Thus, although teachers may not use the teachers' manuals as intended by the publishers (Baumann & Heubach, 1996), they do use the student texts of the programs. This use may be highly variable and idiosyn-

cratic but, in all likelihood, what children view as "books" will be influenced by the commercial programs that schools have bought.

Earlier work (Juel & Roper/Schneider, 1985) suggests that the texts of beginning reading programs can influence the kinds of strategies that children initially use. These strategies can be modified by subsequent experiences but, without a well-planned intervention, modification is unlikely to occur (Juel, 1988). For children whose reading acquisition occurs primarily in school (in contrast to those for whom home reading experiences are important), the texts of beginning reading programs are especially crucial, as they constitute a large part of these children's interactions around texts.

A Model of Text and Reading Acquisition

A model of supportive reading texts needs to take into account whether the different types of texts described in the preceding section make salient the critical information that children need to acquire about written language and the manner in which children go about acquiring this knowledge. We propose that such a model should distinguish between texts that can be read *to* children and those that can be read *by* them. If authentic literature were the only criterion, one could put together a set of books that qualify as interesting to children from sources such as the Children's Choices. However, we need to identify what it is that makes these books instructional, especially if they are to be used with young children who are not independent readers. Research suggests that students who are struggling to read may enjoy listening to books read aloud, but fail to make progress toward independent reading and writing by the end of first grade (Hagerty & Hiebert, 1989; Hiebert, Liu, Levin, Huxley, & Chung, 1995).

In the past, book publishers gauged the "readability" of books by relying on readability formulas (e.g., Chall & Dale, 1995). Such formulas typically considered aspects of text presumed to influence difficulty, such as sentence length and the presence of high-frequency words. With the advent of the whole language movement and authentic children's literature, researchers established the obstacles that rigid application of readability formulas can create for young readers (e.g., Brennan, Bridge, & Winograd, 1986). Consequently, these formulas were abandoned; however, no alternative criteria were devised for assessing text difficulty. Our intention is not to replace the old formulas with a new set, but to develop a set of flexible guidelines that could help guide instructional choices. Reading Recovery has attempted to answer this need by providing a set of qualitative rubrics for leveling and selecting beginning reading texts (Peterson, 1991). Our model differs from these guidelines in some important ways. First, we include quantitative as well as qualitative measures in our work. Secondly, our primary intent is not to level reading materials, but to generate a critical understanding of the already leveled/graded texts that are being commonly used or mandated. The paucity of empirical literature that could illuminate the text scaffolds that we are considering prompts us to make some theoretically motivated conjectures about what might make beginning reading texts easy or difficult.

Our model proposes three constructs: *engagingness, accessibility,* and *generalizability.* All three constructs are critical in understanding the support that texts must provide children in reading acquisition. Further, these constructs interact with one another. For example, young children's engagement in a text will depend on how accessible the text is to them. Although the illustrations and format of the text may invite beginning readers to attend to a book, their interest will wane if they encounter many words they can neither recognize nor decode.

Engagingness

Alvermann and Guthrie (1993) proposed engagement as a defining construct in literacy. Wigfield (1997) notes that within the reading literature, most discussions of engagement have been restricted to a consideration of attitudes toward, and interest in, reading. Rarely has text engagement been considered, and when it has (e.g., Shallert & Reed, 1997), it has been examined primarily in the context of older readers. Hence, there is very little empirical understanding of what makes texts engaging for young children. Since our intent is to describe texts in terms of their *potential* for creating engagement, we have decided to refer to this quality of texts as *text engagingness*. We are using this term to distinguish it from text engagement, which will occur as a result of the interaction between particular readers and particular texts in specific instructional contexts. Thus, teachers have much more control and influence over engagement; engagingness, by contrast, is an affordance of the text itself.

We have adapted our understanding of engagingness from Hoffman et al. (1994), who define engagement in terms of the elements of a text that either initiate or sustain young children's interest in the text. The work of Mervar and Hiebert (1989) suggests that the features most likely to engage initial interest are illustrations and format; when children were asked to identify the characteristics of their favorite books, they focused on illustrations (Mervar & Hiebert, 1989). This suggests that text design influences the engagement of young readers. Once children have begun attending to the text, other factors are likely to sustain their interest. When the content is unfamiliar, complex, or trivial, a text may not sustain children's interest. Language is also likely to play a role in sustaining interest, and when the language is bland, interest is likely to wane. Therefore, there are three features in our construct of text engagingness: design, content, and language. We understand that engagingness will vary according to individual differences among children, such as race, class, ethnicity, or personal interests. Nevertheless, when publishers are developing texts for broad appeal to a large and diverse population of children, it may be important to consider these broad indices of engagement.

Accessibility

Text accessibility, too, is a multifaceted construct. We have defined text accessibility in terms of the total amount of text, the total number of unique

words (an index of the vocabulary load of a program), and the repetition of words within and across the texts of a program.

Relatively little is known about the amount of text, especially the volume of particular sorts of words, needed to support early literacy instruction. Stanovich (1986) argued that there is a reciprocal relationship between a child's reading ability and the amount of text she reads. Few studies, however, have tracked the total word counts in reading programs, or generated a set of guidelines that could help determine an appropriate amount of text for beginning readers. Data from the few available sources suggest that total word counts in beginning reading programs have been on the decline since the 1970s. Juel and Roper/Schneider (1985) report that two basal reading series that they analyzed in the early 1970s had an average of 23,000 words each. Willows, Borwick, and Hayvren (1981) report total word counts ranging from 8,000–12,000 by the mid-1970s. In a more recent analysis, Hoffman et al. (1994) compared total word counts in basal programs from 1986–87 to those from 1993. They found that total word counts had dropped from over 17,000 words in the mid-1980s to over 14,000 words in the 1990s, though there was considerable variation among the series analyzed.

Although total word counts are important, it is also necessary to consider the total number of words in particular texts within the program (i.e., text length). We know that struggling early readers' perceptions of "bulk" of words on a page or in a book can determine their estimation of whether they can read it (Hiebert et al., 1995). Evidence suggests that texts should be shorter during the initial part of first grade, and longer toward the end, as children experience a rapid rate of growth in vocabulary acquisition and length of texts that they can read toward the end of first grade (Hiebert, Colt, Catto, & Gury, 1992).

Whereas the appearance of bulk will influence children's decisions to read a text, it is the volume of unique words that will determine its accessibility to them (Juel & Roper/Schneider, 1985). Unique words have often been discussed in the literature as the "vocabulary load" of a program (i.e., the number of different words to which a program introduces children). Unlike the total amount of text, the number of unique words has been on the rise in most basal reading programs. Chall (1967) reported a drop in the number of unique words from 425 in 1920 to 153 in 1962. However, since then, trends have been reversed. Between the mid-1970s and 1980s, unique words rose to between 500–550 (Rodenborn & Washburn, 1974; Perry & Sagen, 1989). They further rose to 962 words in 1986–87, and to 1,834 in the 1993 literature anthologies analyzed by Hoffman and his colleagues (1994).

Hiebert (1997, 1999) has suggested that we need to pay attention not just to total vocabulary across the year, but also to the ratio between the unique words and the total words within individual texts. This gives us a measure of word repetition within each text. The assumption is that words that are repeated more frequently are learned more easily (Gibson & Levin, 1975). There is also evidence that repeating words across multiple texts within a program is beneficial (Clay, 1991; Gates, 1930; Gates & Russell, 1938–39). We lack an empirical understanding of the optimum amount of word repetition needed within texts. However, a few studies have tried to ascertain the optimum repetition of words at the series level. Early basal series, based on behaviorist principles, repeated words as many as 60 times across the series (Gates, 1930). Based on empirical studies of the effects of word repetition

on reading development, Gates suggested that each word should be repeated 35 times across a series. Historically, the number of word repetitions has been on the decline. Willows et al. (1981) found a large range of word densities (ratios of total to unique words) in basal series from the mid-1970s, ranging from 10.2 repetitions per word to 44.2 repetitions per word. In their comparison of the 1980s and 1990s literature anthologies, Hoffman et al. report a decrease in the amount of word repetition, from 18 repetitions per word in the 1980s to 8 repetitions per word in the early 1990s.

Following from this discussion, it is reasonable to hypothesize that, at least in the very beginning stages of reading development, the total amount of text, the total number of unique words, and the repetition of words will influence the accessibility of a text to beginning readers. Whereas some programs (e.g., Reading Recovery) have emphasized the role of an appropriate picture-text match in models of text accessibility, we decided not to include it because of its dubious role in early word learning (Samuels, 1970).

Generalizability

Exposure to consistent features and patterns within words may be as important as exposure to words themselves. Generalizability is an index of the degree to which texts contain data, in the form of repeated words and intra-word patterns (e.g., letters, letter clusters, and rimes), that might permit students to make generalizations about the pronunciation of individual words and word patterns.

The first feature considered here is the presence of high-frequency words. The use of high-frequency words has traditionally been exaggerated in most beginning reading texts, giving rise to the term "basalese" (Hiebert, 1999). This is, in part, due to evidence that a core group of 100 high-frequency words accounts for approximately 50% of running text in the elementary grades (Adams, 1990). There is also evidence that the acquisition of this core set of words (often taught as "sight words") is linked to children's ability to begin reading independently. Martin and Hiebert (1997) found a consistent pattern of development for students who began first grade as struggling readers but who became successful by the end of first grade. The children knew few words by the middle of first grade, but once they could readily recognize a core set of high-frequency words, they progressed rapidly in their overall reading and word recognition skills. Thus, it seems reasonable to assume that acquiring proficiency with this core set of words will help children to generalize their reading skills to other texts.

However, the remaining 50% of first grade text is made up of a very large number of unique words that occur very infrequently. We have reason to believe that the decodability and the phonetic regularity of the words introduced could have important consequences for student learning. Results from Hoffman, Roser, Patterson, Salas, and Pennington's (1999) analyses suggest that text decodability is significantly correlated with student performance on text, and one of the best predictors of it. Juel and Roper/Schneider's (1985) analyses suggest that the very early use of decodable text for a relatively short period of time can make a difference to student reading performance.

The teaching of predictable patterns (letters, letter clusters, and rimes) has also been suggested as a useful way to approach the teaching of non-high-frequency words (Adams, 1990; Anderson, Hiebert, Scott, & Wilkinson, 1985; Bond & Dykstra, 1967). Adams (1990) especially advocates teaching beginning readers letter-sound correspondences through the use of word families, or rimes. Wylie and Durrell (1970) and Fry (1998) have reported that between 500-600 common English words are composed of a set of about 37-38 phonetic patterns, each of which occurs 10 or more times in primary-grade words. Giving children systematic exposure to these rimes during the early stages of reading acquisition may be one way to support them in the acquisition of strategies for decoding words. There is evidence that children apply their phonics strategies more consistently when they read texts containing many repetitions of these predictable patterns (Juel & Roper/Schneider, 1985). Also, young readers benefit more from exposures to different words using the same phonetic pattern (e.g., *pan, ran, man*), than to many repetitions of the same example (Juel & Solso, 1981). We refer to this as *rime instantiation*.

Method

Rationale for Programs and Components of Programs

Almost all of the currently available programs offer a variety of different kinds of texts—literature, phonics, "little" books, Big Books, workbooks, and the like. In this study, we are restricting ourselves to an analysis of the literature components of three prominent programs. We selected these programs because of their popularity and their differing philosophical orientations. Each of them has been touted as a solution to low reading achievement. Each has achieved substantial market penetration, with two of them included in the recent California adoption cycle. In terms of philosophical orientation, the first program emphasizes its literature-based curriculum, so we refer to this program as the Literature Core (LC) curriculum. The second program is a phonics program (the Phonics Core, or PC, curriculum). The third program tries to wed the best of phonics and literature; hence we labeled it a "Literature/Phonics" (LP) program. The LP program has long advertised its high-quality literature, but it relies at the initial stages on phonics materials in the form of workbooks. When we examined the advertising materials of all of these programs, the use of literature was found to be prominent in all three. However, they offer very different choices in the design of reading instruction and texts.

We chose to focus on the anthology/literature component because of its traditional role in American beginning reading instruction. Even before the days of the McGuffey Readers, a core book has been central in the reading experiences of beginning readers in the United States. In *Becoming a Nation of Readers*, Anderson et al. (1985) identified the anthologies as the core of commercial reading textbook programs. Furthermore, given the pro-

liferation of different components (workbooks, kits, software, supporting text sets) in their programs, we wanted to identify a component that was comparable across programs with different philosophical orientations. One index of the centrality of anthologies is that they are still the most costly components of both the Literature Core and Literature/Phonics program. We were interested in establishing the centrality of these books and the quality and difficulty of the literature. The Phonics Core program was included to provide an interesting contrast, since it has substituted the traditional anthology with a set of literature-based trade books.

Within each of the programs, all of the selections that were part of the first-grade curriculum were analyzed. Since the texts within the programs are presumably ordered in particular ways to support student learning across the school year, we felt that it would be useful to divide the texts into five segments, each representing a particular "time period" (e.g., the beginning, end, or middle of the school year). The five time periods of each program are not directly comparable because each program introduces children to particular kinds of texts (for example the literature collections) at markedly different points during the school year. However, these time blocks do permit a direct comparison of each program's logic for ordering text, and they give us a rough idea of the tasks that children face at particular points in the school year. It is also possible, even probable, that teachers using the three series might introduce particular kinds of texts at similar points in the year (irrespective of the publishers' intentions). In this case, they would be directly comparable to each other.

Text accessibility and generalizability were determined by analyzing all the texts belonging to the program under consideration. Engagingness analyses were conducted only on select texts from the literature components of each program. Ten texts were selected from each series, such that the five time periods were each represented by two texts. Two raters rated each text, in order to establish interrater reliability.

Analysis

Table 1 provides a description of the text characteristics that were considered within each of the three broad dimensions of analysis: engagingness, accessibility, and generalizability.

Text engagingness

Text engagingness was assessed using three six-point rating scales, one for each of the three features of engagingness—content, language, and design. The scales were adapted from Hoffman et al.'s (1994) five-point versions. We retained the original set of overarching questions that Hoffman et al. used in their analysis. The *content* scale focuses on the importance/relevance of ideas, and on the development of themes and characters within texts. The language scale assesses the literary quality and the clarity of language used in the text. The design scale evaluates texts in terms of creativity of design and illustrations. The actual scales used appear in Appendix A.

The raters were six graduate students with backgrounds in literacy or early childhood education. Each rater read and rated a set of 10 texts, which included at least 3 texts from each series. Raters were blind to the series

they were rating. Interrater agreement was calculated by counting the number of instances in which there was exact or approximate (one point difference) agreement in assigning a text to a particular point along the scale. Across all pairs of raters, agreement was 74%.

Table 1: Summary of Text Characteristics

TEXT CHARACTERISTICS	EXPLANATION
1. Engagement	
Content	Importance/relevance of ideas; development of theme/characters; stimulation of thinking/feeling
Language	Literary quality of language; appropriateness of vocabulary; clarity of writing; appropriateness for read-alouds and oral interpretations
Design	Quality of illustrations; attractiveness of design; innovative use of print
2. Accessibility	
Total text	All words in a text
Total unique words	Total number of distinct words
Word density	Ratio of total words to unique words in text
"New" words	Unique words not present in texts from earlier time periods
3. Generalizability	
High-frequency words	Words like *a*, *the*, and *is*, constituting the 100 most frequent words in the English language
Number of rimes	Total number of distinct word patterns in text, such as *-ack*, *-at*, and *-in*
Rime repetition	Number/percentage of distinct rimes that occur more than once in a passage
Instantiations of rime	Number of rimes with more than one onset in a passage
Text decodability	Percentage of words in text that are classified as CCVCC, complex vowel, or multisyllabic words

Text accessibility

We analyzed both text accessibility and generalizability by using a hypercard computer program developed especially for this purpose. This program provides data on the total number of words in the text, text density, frequency of word repetition, number of high-frequency and phonetically regular words, and the decodability levels for different words in text.

Text accessibility was assessed in terms of the total amount of text, the numbers of unique words, and text density (i.e., the ratio of unique words to total words in the texts). We identified three levels of analysis, each of which provides useful information regarding text accessibility. The first level is the individual text, where we raised the question: "What is the average length and density of individual texts in this program?" The second level of analysis is the time period, for which the question of interest is, "How does text accessibility change across time periods?" The final level is the entire program, for which two questions are of interest: "What is the total amount of text that children will be exposed to across the school year in this program?" and "How dense is the entire program?" To answer this last question, we considered both uniqueness and repetition across the texts of a particular series. It should be noted that the total number of unique words for a given

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time period is not the sum of all the unique words in the individual texts within that time period, nor is the total number of unique words for the program the sum of the unique words for the five time periods. This is because many words that are unique to particular texts are repeated across texts and time periods, and such words are counted only once in calculating the total for the broader level of analysis.

Text generalizability

We analyzed text generalizability in terms of three contributing indices: high-frequency words, phonetically regular words, and decodability levels (scaled according to the linguistic difficulty of the patterns). The presence of high-frequency words was assessed by examining the texts/programs for the presence of the 100 most frequent words in the English language (Carroll, Davies, & Richmond, 1971; see Appendix B). We studied their pattern of introduction by counting the number of new high-frequency words introduced at each time period. Finally, we calculated the amount of running text accounted for by high-frequency words.

We analyzed the presence of phonetically regular words by counting the total number of rimes introduced in each program. We also calculated the average number of times a particular rime was repeated in a text, as well as the average number of instantiations of particular rimes in texts.

We analyzed the decodability levels of words by assigning them to one of eight different levels of difficulty (see Appendix C). Levels one through three comprise easily decodable words of the CCVCC type. Levels four through seven represent words of a moderate level of difficulty, including silent *-e* endings, double vowels, and diphthongs. Level eight, which represents the highest level of difficulty according to this classification, consists of multisyllabic words. Using this method for assessing decodability levels, we characterized texts in terms of the percentage of words at each of the eight decodability levels for each text, each time period, and for the entire program.

Results

We begin this section with a brief description of the three instructional programs under consideration. We then examine the results for each of the three constructs: engagingness, accessibility, and generalizability.

Description of the Instructional Programs

Literature Core program

The first-grade literature component of this program consists of five thematically organized volumes. In all, the collection has 55 passages organized around nine themes. Each theme has texts belonging to a variety of genres, such as poetry, realistic fiction, fantasy, and social studies. Many of these texts include selections from award-winning and popular children's authors. Typically (especially in the first three volumes of the series), there are only a

few lines of text on each page, presented in a clear, easy-to-read font. Every page has large, colorful illustrations.

This program is based on the principles of an integrated language arts program. It begins with 11 lessons using Big Books and phonics activities, during which children are introduced to certain key high-frequency words (e.g., *said, and, me, the*). They are also given some practice with initial consonants. Following this, they are introduced to the anthology selections. The teachers' guides for this program are a set of five volumes, one for each of the anthology volumes. They are large and colorful, offering a total of more than 2,000 pages of advice to the teachers. Four aspects of the literacy experience are emphasized in the theoretical framework underlying the teacher's manuals: reading, writing, listening/speaking/viewing, and cross-curricular connections. Each of these aspects is explored through three key teaching frameworks which are used for organizing activities around the anthology reading: shared reading and responding; integrating language arts; and learning (phonics, decoding, phonemic awareness, and comprehension strategies) through the literature. In addition, separate suggestions are given for using the texts with learners of different ability levels, as well as for bilingual and English as a Second Language (ESL) learners. Finally, different kinds of suggestions are made for using the texts with small groups as opposed to the whole class.

It is apparent from this description that this program does not expect the teachers to adopt a cookbook approach to teaching reading. In fact, the program provides the teacher with a plethora of suggestions (most of the student texts are accompanied by over 100 different activities), presumably meant to be used flexibly depending on the context. At the same time, they can be critiqued for providing little structure and guidance to the beginning teacher and for failing to differentiate between core and optional activities.

We were interested in closely examining how the anthology selections are used in teaching children to read. The initial selections of this collection are supposed to be used as read-alouds. Children are asked to follow along in their anthology. The chief strategies used to teach children to read include predicting the text from the illustrations and using predictable sentence structures to join in. The "key words" emphasized in the lesson are usually a set of high-frequency words from the text. Very few of the prompts associated with the reading of the anthology selection are linked to phonics instruction; instead, the emphasis is on modeling and practicing metacognitive strategies.

Besides its anthology component, this program also has a collection of phonics books (not considered in this analysis). However, the link between teaching children to read using the two kinds of texts is not made very clear. Every text has suggestions for phonics-related activities, but these activities are interspersed with many other activities, making it difficult to select among them. Where presented, phonics instruction emphasizes the teaching of beginning and ending consonants and certain spelling patterns. Often, the words used during phonics instruction are not linked to words from the text. At some point in the year (toward the latter half), children are expected to be reading independently, or in cooperation with their peers.

Literature/Phonics program

The LP program has two volumes of anthologies, which are also organized around themes. There is an attempt to include texts from different genres, such as poetry, realistic fiction, and fantasy; however, there is a preponderance of folktales (about one third of the texts). Many of the folktales are traditional tales such as The Little Red Hen and The Hare and the Tortoise. Informational/social studies/science selections are included in the last theme only.

This program is based on the principle that no assumptions can be made about children's abilities to read. Hence, initial reading instruction has to rely on explicit phonics instruction, which can then be leveraged in reading and writing. In accordance with this, the program does not introduce children to anthologies until the second half of the school year. Children are read to from Big Books during the first half of the year, as they are exposed to a systematic progression of phonics lessons. They are given opportunities to read connected text by using the controlled phonics texts and little books that form a part of the LP curriculum. By the time children are exposed to the anthologies, they have already read the entire set of 40 phonics texts and 12 of the 18 available little books.

Even after the anthologies are introduced, reading lessons are not confined to the anthologies alone. The anthology selections are embedded in lessons that continue to include explicit phonics instruction and the reading of little books and other related trade books. LP lessons are intended to be taught in a whole-class format, with virtually no grouping. Each lesson is approximately two to three hours long. The lessons consist of a fairly structured and predictable sequence of events: the prereading phase (consisting of phonics instruction); the reading of the anthology selections; and the postreading phase (in which instruction is integrated with related reading and writing activities). During the reading phase, volunteers are called upon to each read a few sentences of the passage. The amount of text read per day or per child does not vary much across the school year.

It is interesting to note that even though the reading of the anthologies occurs in conjunction with phonics instruction, the two are not always linked explicitly. The sound spelling associations and patterns that are taught during the phonics instruction are not reinforced during the reading of the anthology selection; that is, students do not necessarily encounter many words exemplifying the associations and patterns. Conversely, the prompts provided for the guided reading of the anthology selections involve only an occasional emphasis on decoding skills and strategies. More typically, the prompts focus on modeling metacognitive strategies. In sum, though the program puts a heavy emphasis on phonics instruction, the anthologies are rarely used as an occasion to teach or reinforce phonics-related skills.

Phonics Core program

The PC program does not have a literature anthology. Instead, it has a literature component that consists of 10 individual paperback trade books. Six of the passages are children's fiction, whereas two of them are informational. The literature collection is not a core component of the PC program, but is a part of the "supplemental materials" provided by the publisher.

In sharp contrast to the other programs, the teachers' manual accompanying the literature component of the PC program is a single, slim volume. It supplies a general set of directions to be followed with all texts, followed by specific directions for each text in the series. It also includes a timeline,

which links the introduction of the literature books to specific points in the core phonics program. The first trade book is introduced after 20 phonics lessons, perhaps a month into the school year. After that, a new book is introduced after every 10 phonics lessons—approximately one every three weeks. The general directions are fairly brief; they suggest that the literature books not be presented as a part of the regular reading lessons, but before or after the lesson, when children are working relatively independently. It is suggested that teachers present the books in a whole-class format, and then circulate the books to children. Children are not expected to meet any specific reading standards, but they are supposed to study the texts and the illustrations closely, applying the decoding skills that they have learned through their core phonics program. Teachers are asked to read every story aloud to the children at least three times (each reading separated by five lessons) so that they have enough opportunities to familiarize themselves with story structures and genres. Despite this general emphasis on structure and genre, the specific directions that accompany each text have very little to do with story structures/genres; rather, they consist of a set of fairly specific questions to guide the postreading of the text. The questions test children's skills at providing correct answers to the information presented on each page, and are not intended to teach either metacognitive or decoding strategies.

Text Engagingness

Text engagingness ratings are summarized in Table 2. We will discuss these ratings along with rater comments in the following paragraphs.

Table 2: Means (SDs) of Ratings for Text Engagement

PROGRAM	CONTENT	LANGUAGE	DESIGN
Literature Core	4.75 (.63)	4.7 (.71)	4.75 (.95)
Literature/Phonics	4.3 (.67)	4.6 (.84)	3.7 (.48)
Phoncs Core	4.0 (.91)	3.75 (1.1)	3.65 (1.0)

On the three dimensions of text engagingness—content, language and design—the LC texts are rated highly, as indicated by mean ratings of 4.7 for each dimension. Between 85-90% of the raters rated the texts at least a "4" on each of the three scales. The overall ratings on content suggest that these texts were regarded as containing important ideas and strong content. In particular, the raters noted that the texts revealed cross-cultural appeal, well-developed and engaging characters, and content that might promote the development of science or social studies concepts. The language of the texts were described as rich in literary quality. Many of the texts were described as good read-alouds because of the presence of rhyme and repetition. Most texts were described as simple, clear, and easy to understand; at the same time, raters were concerned that the vocabulary might be challenging and difficult for first graders. Comments about design suggested that

the LC texts were appealing, and that the illustrations extended the text in meaningful ways.

The texts of the LP program received high ratings, on average, for content and language. Ratings for design are not as high (see Table 2). All raters rated LP texts at least a "3" on the content scale, with 75% of them rating the texts more highly. Raters attributed their high ratings of content to the "classic" nature of the folktales, which constituted the bulk of the selections in this program. These texts were described as good read-alouds, as making good use of rhymes, and as providing opportunities for building phonemic awareness. At the same time, they were criticized for lacking in imagination, and for having uninteresting or insufficiently developed story lines. Eighty-five percent of the raters rated the language used in these texts at least a "4" on the language scale. They attributed the high ratings to the rich literary quality of the language and to its being supportive of oral interpretation. Despite this, some raters expressed concern that the vocabulary might be too challenging for first graders. Raters also expressed concern about the design of LP texts, characterizing them as not particularly creative and noting that the illustrations most often represented the texts literally rather than extending them. Approximately half the raters rated the design of these texts at a "3" on the design scale, with the rest rating it higher.

Whereas the content of PC texts was rated relatively highly, the texts received relatively low ratings for language and design (see Table 2). On the content scale, texts in the beginning half of the series were rated more highly than texts in the latter half of the series. The earlier texts were described as being designed for vocabulary building and as having themes relevant to content areas such as science and social studies. Later texts were criticized for having "thin" content and lacking adequate theme development. Ratings for the language scale reveal that 42% of the texts are rated below a "3" on the scale; again, the poorly rated texts come from the latter half of the series. Raters commended earlier texts for using language and vocabulary that is familiar and easily accessible to first graders; in the same breath, however, raters criticized these texts for lacking literary quality. The PC texts received the poorest ratings on the design scale, but again, the earlier texts were rated higher than the later ones. Illustrations were described as not extending the text and, at least in one instance, of perpetuating white, middle-class values. For some books, the placement of text was described as problematic, with uneven spacing between words and too much text crowded onto each page. Overall, the design of PC texts is described as not engaging.

One-way ANOVAs were conducted to evaluate the significance of mean differences among publishers on the rating scales. The only statistically significant result emerged in the design scale ($F = 5.4$, $df = 2$, $p < .05$). Post-hoc Tukey tests reveal that the ratings on the design scale are significantly higher for LC texts than for either the LP or the PC texts. The difference between the language ratings for LC and PC texts, which favors the LC texts, approaches (though does not achieve) statistical significance. ($F = 3.3$, $df = 2$, $p < .052$).

Table 3: First 40 Words Introduced in Each Series*

LC (1 TEXT)	LP (1 TEXT)	PC (2 TEXTS)
clap	***a***	***what***
your	game	***are***
hands	***called***	***you***
stomp	piggle	***called***
feet	oh	***a***
shake	bear	baby
arms	homer	dog
then	***said***	***is***
take	***will***	pup
a	***you***	***but***
seat	play	***so***
rub	***with***	seal
tummy	me	cow
pat	yes	calf
head	*I*	elephant
fins	***what***	horse
something	shall	foal
yellow	***we***	donkey
red	***do***	fox
reach	***know***	cub
for	asked	tiger
the	***like***	goat
sky	triggle	kid
wiggle	biggle	***and***
toes	let	sometimes
stick	think	***we***
out	miggle	kids
tongue	diggle	too
and	give	went
touch	***time***	***for***
nose	***see***	walk
roar	***now***	***with***
like	***have***	Jenny
lion	***and***	got
growl	cried	hungry
bear	try	Tom
give	wiggle	sleepy
me	giggle	David
kiss	sniggle	wet
do	figgle	mom

* Words in bold are high-frequency words.

Text Accessibility

For the readers' convenience, the first 40 words that occur in each of the three programs are presented in Table 3. A perusal of these words in Table 4 conveys visually the differences in the demand characteristics of texts across the three programs; as such they can be used to complement and instantiate our statistical comparisons.

Table 3 reveals that the anthologies have a very fast pace for the introduction of unique words, with the first 40 unique words occurring in the very first text of the LC and LP anthologies. These words also seem less decodable than the words in the phonics and little book programs.

Referring now to Table 4, we notice that the three programs introduce children to very different amounts of text across the year. Both the LC and the LP programs introduce children to over 10,000 words across the school year. In comparison, the PC literature curriculum comprises approximately 3,500 words—significantly fewer than the other two programs. In terms of vocabulary load, the LC and the LP texts are again very similar—over 1,500 different words each—whereas the PC curriculum introduces children to about 1,250 words.

Although it is informative to get a sense of the overall "bulk" of the curriculum, individual texts serve as the basic instructional unit in most cases. It is therefore more critical to examine the amount and density of words at the level of the individual text, as it provides a fairer test of the ways in which publishers have tried to accommodate matters of accessibility and generalizability. The information on the key elements of text accessibility—the number of words per passage, the number of unique words, and the percentage of "new" words introduced in each period—is also presented in Table 4 for the three programs.

Table 4 reveals that the average LC text consists of approximately 170 words, about 75 of which are unique, indicating that one out of every two or three words in the text will be a different one. The average LP text is significantly longer than the average LC text: It has approximately 315 words, of which 119 are unique. Longer still is the average PC text, consisting of about 355 words, of which 127 are unique. Thus, when texts are examined at the individual text level, a very different picture of accessibility emerges. At the series level, both the LC and the LP texts seemed voluminous, while the PC texts seemed relatively small. Matters are just the opposite for individual texts. Suddenly the PC texts appear to be by far the most voluminous; they are fewer in total number, but much longer than the texts of the other programs. The LC texts, on the other hand, emerge as the shortest, with the fewest unique words.

How does the amount/density of text progress across time in the three programs? Figure 1 shows that there really is no systematic progression in these aspects in the LC program: Period 1 texts are a little longer than texts of Periods 2 and 3, and contain more unique words. The LP texts also reveal little progression across time, with the longest texts belonging to Period 2, and more repetition of words in Period 5 than in Period 1. In contrast, PC texts increase in length from the beginning to the end of the series, with the greatest increase occurring between Periods 3 and 4. In fact, the increase in

Table 4: Text Accessibility Across Programs and Time Periods

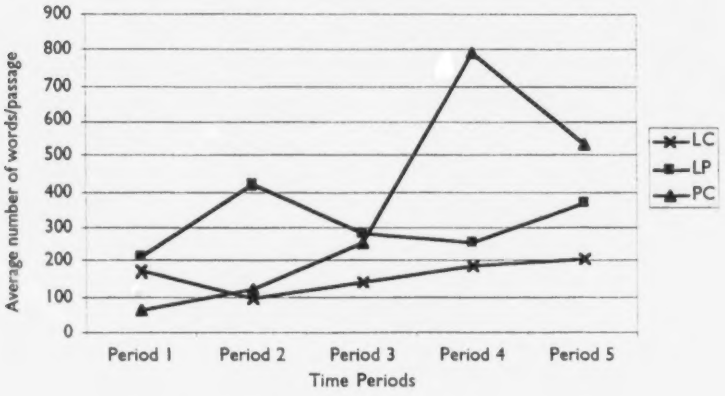
	Time	Number of Texts	All Words (Average Per Text)	Unique Words (Average per Text)	Word Density Ratios	% of Single Use Unique Words	% of Unique Words Repeated 5+ Times
Literature Core	All	55	9372 (170.4)	1535 (74.5)	1:2.3	45%	23.9%
	1	4	694 (173.5)	238 (72.8)	1:2.4	60%	12.2%
	2	9	871 (96.8)	295 (45.3)	1:2.1	58.3%	16.6%
	3	10	1467 (146.7)	346 (54.2)	1:2.7	49.4%	22.8%
	4	17	3169 (186.4)	712 (81.3)	1:2.3	49.7%	22.8%
	5	15	3171 (211.4)	854 (98.2)	1:2.2	50.5%	15.8%
Phonics/ Literature	All	34	10724 (315.4)	1562 (119)	1:2.6	45.2%	26.5%
	1	5	1091 (218.2)	388 (99.8)	1:2.2	53.4%	13.9%
	2	6	2516 (419.3)	520 (141.8)	1:2.9	47.1%	25.8%
	3	7	1986 (283.7)	465 (107.4)	1:2.6	50.3%	21.9%
	4	7	1800 (257.1)	511 (116.9)	1:2.2	51.3%	18%
	5	9	3331 (370.1)	705 (125)	1:3	47.4%	20.7%
Phonics Core	All	10	3551 (355.1)	1267 (126.7)	1:2.8	30.8%	12.5%
	1	2	126 (63)	44 (23)	1:2.7	70.5%	20.5%
	2	2	248 (124)	98 (52.5)	1:2.4	58.2%	12.2%
	3	2	508 (254)	213 (116.5)	1:2.2	61%	10.3%
	4	2	1596 (798)	446 (259)	1:3.1	53.1%	16.1%
	5	2	1073 (536.5)	343 (182.5)	1:2.9	54.2%	15.2%

average word length from Period 3 to 4 is immense, nearly fourfold (250 versus 800). Even granting that typical beginning readers go through a rapid word learning period toward the end of first grade, it seems a challenging, if not a daunting, task to make such a huge leap in such a short period of time. We also see that the texts of this series are a little less dense than for the other two series, though the difference is not substantial.

Table 4 yields information about the number of words that occur only once across the entire program. We see that about 45% of the words in both the

LC and the LP curricula are never repeated. The PC curriculum has fewer single occurrence words: about 30%. When we examine trends across time, the results do not suggest progression in difficulty across time. On the other hand, there are a larger percentage of single occurrence words in the beginning periods of the LC and the PC programs (60% and 53%, respectively, in the first time period, as opposed to 51% and 48%, respectively, in the last time period). The data also reveal the lack of word-sharing among texts belonging to different periods of time in all three programs. Between 50–90% of the unique words introduced in a given time period are "new" words—words that are not carried over from the earlier texts.

Figure 1: Average number of words per passage across time.



Text Generalizability

Generalizability focuses our attention on opportunities students have to learn a core set of high-frequency words as sight words and a set of common intraword patterns (rimes), and addresses the broader issue of the overall decodability of words within texts.

High-frequency words

Table 5 provides an overview of the numbers and percentages of high-frequency words in text. Since the proportion of high-frequency words did not vary across the five time periods, we have excluded this data from the table.

We see from Table 5 that most of the 100 core high-frequency words are represented in the curricula of all three programs. These high-frequency words account for approximately 45–50% of the text, which is the typical percentage for most texts (Caroll et al., 1971). In other words, the highly frequent words appear as they would be expected to in common everyday texts of all sorts for all ages of readers. The literature has not been chosen or adapted to exaggerate highly frequent words at any period of time in any of the programs.

From the perspective of these textbook programs, there also appears to be little worry about the rate at which highly frequent words are introduced. In the LC and the LP programs, most highly frequent words are introduced during the first time period. In the LC program (where the literature anthologies are described as a core instructional component according to advertisements), half of the 100 most frequent words are introduced in the texts of the first time period. In the LP program, where the texts of the anthology become the instructional focus during the second half of first grade, 78 of the 100 most frequent words are present in the selections that children read in the earliest time period. The assumption in the LP program is that 100 high-frequency words have already been learned in another venue, and therefore that most of them can be introduced in the early passages. The pattern is slightly different for the PC program. The bulk of the high-frequency words (about 40%) are introduced during Period 3 of instruction. This is consistent with the theoretical approach of this program, which does not encourage the teaching of whole-word recognition. However, it is not consistent with what we know about how young children learn to read. There is some evidence that children benefit from whole-word approaches at the beginning stages of reading instruction, which can be supplemented later by a code-oriented approach (Vellutino & Scanlon, 1986).

Table 5: Text Generalizability: High-Frequency Words and Rimes

Publisher	High-Frequency Words			Rimes		
	Number of H.F. Unique Words	% of Passage Accounted for by H.F. Words	% of Text Repetition Accounted for by H.F. Words	Total # of Rimes Across Series (Average # of Rimes per Passage)	% of Repeated Rimes per Passage	Instatiations of Rime Per Passage
Literature Core	98	46	54	357 (41)	13	1.9
Literature/ Phonics	99	49	58	361 (62)	16	2.2
Phonics Core	94	50	61	247 (60)	17	2.2

Rimes

We were also interested in examining exposure to various phonics elements (letters, letter clusters, and rimes) on the grounds that early, systematic exposure to rimes might be expected to aid students in decoding unknown words encountered later (see Table 5). As with high-frequency words, we did not notice many variations in the patterns for rime introduction over time. The absolute number of rime patterns introduced did increase across the school year, but when viewed as a proportion of the number of unique words introduced during these periods, there was no progression in difficulty level over time. Hence the data on the time periods have been excluded from Table 5.

Table 5 reveals that all the three programs introduce children to a large number of rimes across the school year, as many as 360 in the LC and LP curricula and about 250 in the PC program. At the level of individual passages, texts from the LC and the PC programs have as many as 60 unique rimes per passage, while LP texts have about 40 different rimes. We need to consider these figures in light of the fact that about 37-38 rimes account for about 500-600 common English words (Fry, 1998; Wylie & Durrell, 1970).

We calculated the percentage of rimes that are repeated at least once within given texts. Our assumption is that texts which provide multiple opportunities with a core set of word patterns will ultimately prove to be the most generalizable. Our results suggest that none of these texts do very well in controlling the ratio of the rimes to the unique words. Less than 20% of these patterns appear more than once in any of these passages, and on average, there are only two instantiations of the word patterns that do recur. If these texts are representative of the selections that children encounter, children will have very few opportunities to gain familiarity with and draw generalizations about the pronunciation of word patterns. Even if we grant the expectation that teachers can and will provide explicit instruction on these patterns, they will not be in a position to make sure that children get a chance to apply their emerging word-pattern knowledge to text that exemplifies those patterns.

Table 6: Percentage of Words at Different Decodability Levels

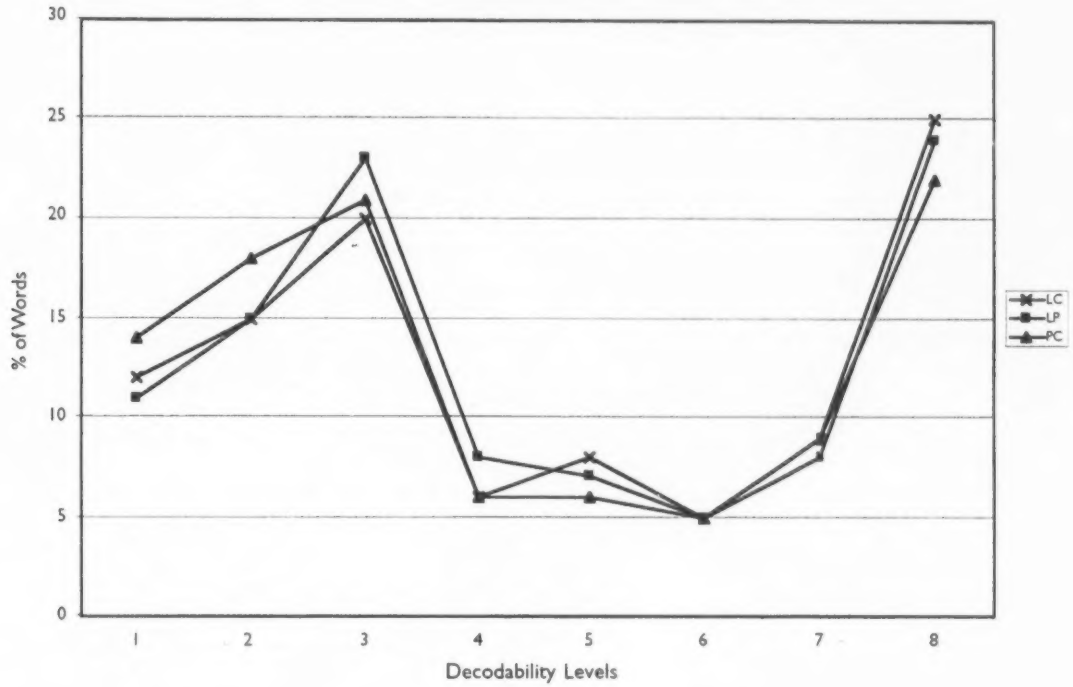
	Time	% of CCVCC Words: Levels 1–3 (% of "New" Words at This Level)	% of Complex Words: Levels 4–7 (% of "New" Words at This Level)	% of Multisyllabic Words: Level 8 (% of "New" Words at This Level)
Literature Core	All	47	27	26
	1	48	28	23
	2	47 (23)	25 (29)	28 (47)
	3	55 (26)	24 (26)	19 (49)
	4	47 (16)	28 (26)	25 (59)
	5	44 (11)	27 (21)	30 (66)
Literature/ Phonics	All	50	27	24
	1	47	24	30
	2	49 (22)	25 (31)	25 (47)
	3	52 (16)	30 (33)	18 (51)
	4	50 (14)	25 (25)	24 (62)
	5	47 (23)	28 (22)	25 (56)
Phonics Core	All	49	25	26
	1	64	16	20
	2	53 (41)	27 (33)	19 (25)
	3	45 (25)	30 (35)	25 (40)
	4	45 (21)	27 (28)	27 (51)
	5	52 (22)	20 (17)	28 (61)

Decodability

All the three programs are remarkably similar with regard to the decodability of words in the texts (see Table 6 and Figure 2). These texts are surprisingly bimodal: They introduce children to a preponderance of C[C]VC[C] and multisyllabic word patterns—that is, to either very simple or very difficult word patterns. About 20–30% of all texts, including those from the beginning time periods, are composed of multisyllabic words, and about 40–50% are made up of some variant of the basic C[C]V[C]C pattern. These patterns

do not change significantly across time. Two sorts of questions are prompted by these data. First, we wonder about the ability of the average first grader to decode so many multisyllabic words, especially during the very beginning stages of instruction. Second, we were surprised that the PC program, using such highly controlled texts, did not exhibit a greater progression in the decodability of words over time.

Figure 2: Distribution of words across decodability levels for the three programs.



Sharing of words and rimes across texts of a program

As noted earlier, most contemporary publishers offer a wide variety of beginning reading texts, of which the literature anthologies are only one type. The three programs that we have considered here also offer two other kinds of texts that are meant to be read by beginning readers—phonics texts and little books. We were interested in finding out the extent to which the different types of texts within the series "shared" words and rimes. Our assumption is that programs with a greater amount of sharing will provide more opportunities for young readers to encounter the same words/word patterns in different contexts.

Table 7 provides an estimate of sharing within particular programs. We find that the LC anthologies have only 12.7% words in common with both the phonics texts and the little books. The LC anthologies have more words in common with the little books (approximately 40%) than with the phonics texts (approximately 25%). We can understand this in terms of this program's emphasis on authentic children's literature, which is common to the anthology and little book programs. At the same time, teachers who are planning to use the anthologies in conjunction with the phonics texts

should be alert to the fact that the proportion of shared words is relatively low. The LP anthologies share only 9.7% of their unique words with both the phonics texts and the little books. These anthologies have equal proportions of words that they share with either of these text types (approximately a quarter of all words). This again can be understood in terms of this program's equal emphasis on authentic literature and phonics. The PC program has the least number of words common to all three of its text types (about 8%). The anthology selections share more words with the phonics texts than with the little books. This is not surprising, given that most of the unique words in this program are concentrated in its phonics texts, thereby giving more opportunity for overlap with the other text types.

Table 7: Unique Words and Rimes Shared Across a Publisher's Program

Publisher	% of Unique Words Shared With Phonics	% of Unique Words Shared With Little Book Texts	% of Unique Words Common to All Components of the Publisher's Program	% of Unique Rimes Shared With Phonics Texts	% of Unique Rimes Shared With Little Book Texts	% of Unique Rimes Common to All Components of the Publisher's Program
Literature Core	25.6%	40.4%	12.7%	60%	72%	40%
Literature/ Phonics	24%	24.6%	9.7%	52%	55.3%	31%
Phonics Core	21.5%	11.6%	7.9%	43%	25%	19%

In contrast, Table 7 reveals that rimes are shared with a greater frequency across the three programs. Again, the PC program has the least proportion of shared word patterns among the different types of texts.

Discussion

The anthologies of these three programs vary considerably in the reading experiences that they offer beginning readers and in the function(s) served by the anthology in the acquisition of strategies. However, our analysis of the texts in the anthologies of three different first-grade reading programs indicate that program designers also share several assumptions about children's reading acquisition. In this section, we will review some of those similarities and differences, and explore their compatibility with existing knowledge on how children learn to read.

With the recent interest in literature-based curricula in reading instruction, we were curious about what defines a set of trade or literature books as an instructional program. Drawing from the research literature, we developed a model that would allow us to evaluate whether a text supports the acquisition of beginning reading, and we applied this model to an analysis of the literature components of three prominent reading programs. Our model emphasizes three aspects of texts that are important instructionally—engag-

ingness, accessibility, and generalizability. We believe that each of these aspects is important in identifying a corpus of text that can support early reading acquisition.

Our analysis of text engagingness indicates that most of the anthologies in use today are highly rated in terms of content. There is more variability in terms of language, in which the two literature-based programs in our analyses are rated higher than the Phonics Core program. However, the greatest variability seems to be in terms of design—the LC program was rated as the most appealing and innovative in terms of design, as compared with either the LP or the PC programs. Given that design features such as illustrations can scaffold children's engagement in meaningful reading (Clay, 1985), more attention needs to be paid to this aspect of text, especially in the literature collections, which are intended to produce a high degree of reading engagement. From our perspective, engagingness is a primary filter to consider in text selection. A text might possess wonderful qualities in terms of its capacity to support children's acquisition of sight vocabulary, phonics skill, or other important skills and strategies (e.g., comprehension), but if it will not engage and sustain children's interest and attention, it will never have the opportunity to provide that support.

The second dimension we considered in our analyses is text accessibility. One key observation in terms of text accessibility is that both of the programs with strong literature components (the LC and the LP programs) introduce children to a large amount of text (about 10,000 words) across the school year, though this figure is lower than that reported for texts from earlier years (Hoffman et al., 1994). In terms of individual texts, we see two patterns: The LC and the LP programs have numerous, shorter texts, whereas the PC series comprises just 10 relatively long texts. Which is a better model in terms of our understanding of young children's reading capabilities? We would hypothesize that, given young children's short attention spans and their tendency to estimate their capacity to read a text in terms of its length, numerous short texts might be a better option than a few long ones. However, it should be noted here that none of the programs offer very short texts, or texts designed to gradually increase in length across the school year. The LC and LP programs start with texts that have between 170 and 220 words per text, and the beginning texts are often longer than texts belonging to the later periods. The texts in the PC program do appear to be graded in terms of increasing length; however, the very steep trajectory of increasing length may be more than most beginning readers are able to keep up with.

It is also apparent from the results that none of these programs are considering the number of unique words that they introduce per text, and its ratio to the total amount of text. Our data indicate that, should children be asked to read the text independently or in a teacher-directed situation, they would need to apply a high level of word recognition skill. Usually, the most stringent word density ratios occur in the first time period. A word density ratio of 1:2 or 1:3 may not be prohibitive for a beginning reader if there are 10 different words in a book. However, word density ratios need to be considered in relation to the number of total words per passage that we have already reviewed. The fewest number of words in any single selection are the 63 per story of the PC curriculum's first time period. The LC program—where the selections presumably form a central part of the instructional curriculum—

begins with passages with an average of 175 words. With word density ratios of 1:2 or 1:3, children will be asked to have the skills (and patience) to figure out over 70 different words per selection. The argument can be made that the texts for the earlier periods are intended as "follow along" (shared reading) texts, not intended to be read by students on their own until repeatedly read by an adult. A critical question, however, is whether children who are learning to attend to words can track print in a text with 175 words. Even if an adult is reading the text aloud and a child is following along, the task of attending to each of 70 different words—especially when most appear only once—is likely to be an extremely challenging task for children who can recognize only a handful of words (if that) on their own.

Our analyses of text generalizability focused on two features: high-frequency words and word patterns (which was indexed by two features—decodability and rimes). Results suggest that the texts in these programs, though not containing an exaggerated number of high-frequency words, do provide children with ample opportunities to familiarize themselves with a core set of 100 high-frequency words. The three programs differ in their pattern of introducing the high-frequency words, with the LC and the LP programs introducing a large number of high-frequency words in the very beginning texts and the PC program introducing them much more gradually. The high-frequency words account for about half of the running words in the texts across the three programs.

The results on the introduction of word patterns is more problematic. Our results suggest that publishers do not consider the number of word patterns (i.e., rimes) that they introduce in each text. A very large percentage of the total corpus of unique words is composed of unique word patterns, implying that children are not getting a chance to engage repeatedly with a few core rimes within a given text. When a given rime is repeated, it is repeated an average of twice per series. We need to view these findings in light of the fact that just 37–38 rimes account for about 500–600 common words in primary-level texts (Wylie & Durrell, 1970). We question whether these texts provide young readers with enough opportunities to develop generalizable knowledge about word reading strategies.

Further, between 20–25% of the words in texts across the programs, and across time periods, are multisyllabic. Although the absolute proportion of multisyllabic words does not change across time, additional analyses reveal that a larger proportion of the new words introduced in the LC and PC programs comprise multisyllabic words. In contrast, the new words introduced by the LP program remain at the same level of difficulty. When we consider these results in terms of those on text accessibility, the problem becomes more apparent. Our results imply that anthologies are introducing children to a large number of relatively hard words to decode, and then not providing them with enough opportunities for learning to read them.

So far we have outlined similarities across all three programs. However, we realize that each publisher intends these texts to be used in very different ways, and the development of children's reading skills might vary greatly depending on how these texts are used to provide reading instruction. As described earlier, the LP program does not intend its literature component to be introduced until the second half of first grade. Children spend about half of the school year working on their phonics books, little books, and workbooks until they attain proficiency in basic reading skills. This is the

point at which they are introduced to the literature anthologies. Assume that teachers use these books in accordance with the publishers' intentions. It is still not obvious, to us at least, how children will be able to handle the level, type, and volume of text expected of them after a semester of reading skills instruction. The amount of text to be read now needs to be squeezed into half a school year, which implies that children are able to read and digest text at a very rapid pace. On the other hand, it may well be that in school districts where the LP program is mandated, teachers who have difficulties with the reading experiences of the phonics readers and/or little books may use only the literature components of these programs in their instruction. In that case, children will be expected to read these texts from the very beginning of the year.

The PC program, in contrast, intends the literature component to be used to supplement phonics instruction. Children read only 10 literature books through the whole year, with the reading of each text being separated by several weeks. These texts are introduced after about a month of first-grade reading instruction, and children are not expected to meet any reading standards with regard to these books. All of the books are read aloud by teachers the first time, and children are expected to answer content-related questions. It is very unlikely that teachers will indeed use these texts in this manner. It is more likely that most teachers will use these texts as opportunities for providing reading instruction. This program raises concerns, not only because of its low engagingness, but also due to its accessibility and generalizability features. We suggested earlier that programs with short but varied kinds of texts would provide the best basis for reading instruction. The PC program, in contrast, provides very few texts (i.e., a narrow selection), each of which is relatively long (with the exception of the first few texts) and dense. Our findings suggest that "controlled" texts, such as these, are not controlling for certain crucial text characteristics that could aid reading instruction.

The LC program uses its anthologies as the core vehicle for reading instruction. It therefore becomes all the more imperative that these texts provide opportunities to support systematic instruction. Our analysis did reveal that the texts in this program were rated as the most engaging to first graders. However, as we have argued, engagingness is a necessary but not sufficient condition in the capacity of texts to support reading instruction, especially for beginning readers, many of whom have had restricted opportunities to interact with text. The opportunities provided by the LP texts are not systematic. The program seems to be based on the premise that beginning readers can develop a rapid recognition ability with a large and diverse corpus of words, many of which are very difficult words for young readers. Only a relatively small number of words, almost exclusively high-frequency words, are repeated with any frequency. It is also interesting that while the anthologies form the "core" of this curriculum, many of the texts are read-alouds and read-alongs, at least until the fourth time period (which corresponds to about March of first grade). The argument could be made that these texts are not intended to be read by children at the early stages of instruction. In this case, we wonder why these texts are being marketed as very expensive, every-pupil anthologies rather than in Big Book formats.

In the final analysis, we conclude that none of these highly successful programs is able to instantiate these crucial text features in ways that could sup-

port reading acquisition, especially for students who depend on schools to help them learn to read. From all indications, the trajectory of reading acquisition for these children is much more gradual than these curricula would lead one to expect. Even if the texts are being read aloud to children (rather than being read by them), we can raise questions about whether children who are only beginning to attain phonemic awareness can track the sheer number of words in these texts, not to mention the high proportion of multisyllabic words.

In conclusion, we argue that, irrespective of the philosophical orientation, prominent (and in some cases mandated) reading programs are not attending to principles crucial to the design of superior instructional texts for beginning reading. Although we applaud the recent shift toward more engaging and authentic literature for children, we believe that this should be accompanied by an understanding of what constitutes a "considerate" text for beginning/struggling readers and their teachers. We reiterate the need for distinguishing between texts read to children and texts read by them. Children need multiple and varied opportunities for familiarizing themselves with authentic literature; however, we must be very careful that in our efforts to provide these opportunities, we do not inadvertently set children up for failure. We are not arguing for a return to the contrived texts of the past where a single type of word (phonetically regular, high-frequency) was emphasized to the point of readers' exasperation. Rather, texts should be based on multiple criteria, which would include, at a minimum, exposure to a core of high-frequency words, a corpus of words that would encourage students to apply the alphabetic principle, and a set of ideas and experiences that would support reading for meaning and enjoyment (Hiebert, 1999).

It is also important to question the centrality of the literature anthologies in many reading programs today. The anthologies originally evolved as books that were meant to be read by children (Chall & Squire, 1991). However, many of the texts included in the current set of anthologies are meant to serve as occasions for either teacher read alouds or "shared reading" (as in the LC curriculum). Given the high costs to districts of procuring these texts, it is important to ask if the form (of the every-pupil anthology) is now appropriate for the function (read-alouds and read-alongs). Finally, more empirical attention needs to be paid to the teacher "guides" (which are currently little more than thick compendiums of suggestions) to determine what kinds of scaffolds they provide to beginning teachers and how they might be designed in a more useful manner.

References

Adams, M. J. (1990). *Beginning to read: Thinking and learning about print.* Cambridge, MA: MIT press.

Alvermann, D., & Guthrie, J. (1993). *Themes and directions of the National Reading Research Center* (National Reading Research Center, Perspectives in Reading Research, No. 1). Athens: University of Georgia, National Reading Research Center.

Anderson, R. C., Hiebert, E. H., Scott, J., & Wilkinson, I. A. G. (1985). *Becoming a nation of readers.* Champaign-Urbana, IL: Center for the Study for Reading & The National Academy of Education.

Baumann, J. F., & Heubach, K. M. (1996). Do basal readers deskill teachers? A national survey of educators' use and opinions of basals. *Elementary School Journal, 96* (5), 511-526.

Bond, G., & Dykstra, R. (1967). The cooperative research program in first-grade reading instruction. *Reading Research Quarterly, 2,* 5-142.

Brennan, A. D., Bridge, C. A., & Winograd, P. N. (1986). The effects of structural variations on children's recall of basal reader stories. *Reading Research Quarterly, 21* (1), 91-104.

Carroll J. B., Davies, P., & Richmond, B. (1971). *Word frequency book.* Boston: Houghton Mifflin.

Chall, J. S. (1967/1983). *Learning to read: The great debate* (3rd ed.). Fort Worth, TX: Harcourt Brace College Publishers.

Chall, J. S., & Dale, E. (1995). *Readability revisited: The new Dale-Chall readability formula.* Cambridge, MA: Brookline Books.

Chall, J. S., & Squire, J. R. (1991). The publishing industry and textbooks. In R. Barr, M. L. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. II, pp. 120-146). New York: Longman Publishing.

Clay, M. M. (1985). *The early detection of reading difficulties.* Portsmouth, NH: Heinemann.

Clay, M. M. (1991). *Becoming literate: The construction of inner control.* Portsmouth, NH: Heinemann.

Fry, E. (1998). The most common phonograms. *The Reading Teacher, 51,* 534-547.

Gates, A. I. (1930). *Interest and ability in reading.* New York: The MacMillan Company.

Gates, A. I., & Russell, D. H. (1938-39). Types of materials, vocabulary burden word analysis, and other factors in beginning reading. *The Elementary School Journal, 39,* 27-35, 119-128.

Gibson, E. J., & Levin, H. (1975). *The psychology of reading.* Cambridge, MA: MIT Press.

Hagerty, P., & Hiebert, E. H. (1989). Students' comprehension, writing, and perceptions in two approaches to literacy instruction. In S. McCormick & J. Zutell (Eds.), *Cognitive and social perspectives for literacy research and instruction* (38th Yearbook of the National Reading Conference, pp. 453-460). Chicago: National Reading Conference, Inc.

Hiebert, E. H. (1997). Selecting texts for beginning reading instruction. In K. H. Au & T. E. Raphael (Eds.), *Literature-based instruction: Present issues, future directions* (pp. 195-218). Newton, MA: Christopher-Gordon.

Hiebert, E. H. (1999). Text matters in learning to read. *The Reading Teacher, 52* (6), 552-569. (Also available as CIERA Report #1-001. Ann Arbor: CIERA/University of Michigan.)

Hiebert, E. H., Colt, J., Catto, S., & Gury, E. (1992). Reading and writing of first-grade students in a restructured Chapter 1 program. *American Educational Research Journal, 29,* 545-572.

Hiebert, E. H., Liu, G., Levin, L., Huxley, A., & Chung, K. (1995, November). *First graders reading the new first-grade readers.* Presented at the annual meeting of the National Reading Conference, New Orleans, LA.

Hoffman, J. V., McCarthey, S. J., Abbott, J., Christian, C., Corman, L., Curry, C., Dressman, M., Elliott, B., Matherne, D., & Stahle, D. (1994). So what's new in the new basals? A focus on first grade. *Journal of Reading Behavior, 26* (1), 47-73.

Hoffman, J., Roser, N., Patterson, E., Salas, R., & Pennington, J. (in press). *The effects of leveled texts and varying types of support on first graders' reading performance.* Ann Arbor: CIERA/University of Michigan.

Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology, 80* (4), 437-447.

Juel, C., & Roper/Schneider, D. (1985). The influence of basal readers on first grade reading. *Reading Research Quarterly, 20* (2), 134-152.

Juel, C., & Solso, R. L. (1981). The role of orthographic redundancy, versatility and spelling-sound correspondences in word identification. In M. L. Kamil (Ed.), *Directions in reading: Research and Instruction* (30th Yearbook of the National Reading Conference, pp. 74-92). Rochester, NY: National Reading Conference.

Martin, L. A., & Hiebert, E. H. (1997, April). *Becoming literate in school: Examining the profiles of first-grade readers in Chapter 1.* Paper presented at the annual meeting of the American Educational Research Association, Chicago.

McCarthey, S. J., Hoffman, J. V., Christian, C., Corman, L., Elliott, B., Matherne, D., & Stahle, D. (1994). Engaging the new basal readers. *Research and Instruction, 33* (3), 233-256.

Mervar, K., & Hiebert, E.H. (1989). Literature selection strategies and amount of reading in two literacy approaches. In S. McCormick & J. Zutell (Eds.), *Cognitive and social perspectives for literacy research and instruction* (38th Yearbook of the National Reading Conference, pp. 529-535). Chicago: National Reading Conference, Inc.

Perry, L.A., & Sagen, P.S. (1989). Are basal readers becoming too difficult for some children? *Reading Improvement, 26* (2), 181-185.

Peterson, B. (1991). Selecting books for beginning readers. In D. E. DeFord, C. A. Lyons, & G. S. Pinnell (Eds.), *Bridges to literacy: Learning from Reading Recovery* (pp. 119-147). Portsmouth, NH: Heinemann.

Rodenborn, L.V., & Washburn, E. (1974). Some implications of the new basal readers. *Elementary English, 51*(6), 885-888.

Samuels, S. J. (1970). Effects of pictures on learning to read, comprehension and attitudes. *Review of Educational Research, 40*, 397-408.

Shallert, D. L., & Reed, J. H. (1997). The pull of the text and the process of involvement in reading. In J. T. Guthrie & A. Wigfield (Eds.), *Reading engagement: Motivating readers through integrated instruction* (pp. 68-85). Newark, DE: International Reading Association.

Shannon, P. (1997). Manufacturing descent: Basal reading and the creation of reading failures. *Reading & Writing Quarterly: Overcoming Learning Difficulties, 13*, 227-245.

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21*(4), 360-407.

Stein, M., Johnson, B., & Gutlohn, L. (1998). *Analyzing beginning reading programs: The relationship between decoding instruction and text.* Manuscript submitted for publication.

Vellutino, F. R., & Scanlon, D. M. (1986). Experimental evidence for the effects of instructional bias on word identification. *Exceptional Children, 53* (2), 145-155.

Wigfield, A. (1997). Children's motivations for reading and reading engagement. In J. T. Guthrie & A. Wigfield (Eds.), *Reading engagement: Motivating readers through integrated instruction* (pp. 14-33). Newark, DE: International Reading Association.

Willows, D. M., Borwick, D., & Hayvren, M. (1981). The content of school readers. In G. E. MacKinnon & T. G. Waller (Eds.), *Reading research: Advances in theory and practice* (Vol. 2, pp. 100-175). New York: Academic Press.

Wylie, R. E., & Durrell, D. D. (1970). Teaching vowels through phonograms. *Elementary English, 47*, 787-791.

Appendix A: Text Engagingness Rating Scales

Instructions

Please rate the text along the three dimensions described below. Each dimension is assessed along a 6-point scale, with "6" representing a high quality text in terms of that dimension, and "1" a poor quality text. While rating the texts, please keep the over-arching questions (described along with each scale) in mind. Assume the audience to be first-grade readers. Indicate your choice by circling one of the numbers along the scale.

I. Content

Overarching questions:

- Are the ideas important?
  (a) Are the ideas personally, socially, or culturally relevant?
- Is there development of an idea, character, or theme?
- Does the text stimulate thinking and/or feeling?

Scale

6 5 4 3 2 1

Comments:

II. Language

Overarching questions:

- Is the language rich in literary quality?
- Is the vocabulary appropriate but challenging?
- Is the writing clear?
- Is the text easy and fun to read?
- Does the text lend itself to oral interpretation?

Scale

6 5 4 3 2 1

Comments:

III. Design

Overarching questions:

- Do the illustrations/art enrich the text?
- Is the use of design creative and attractive?
- Is there creative/innovative use of print?

Scale

6 5 4 3 2 1

Comments:

Appendix B: 100 Most Highly Frequent Words in the English Language

1. the	26. or	51. out	76. its
2. of	27. by	52. them	77. who
3. and	28. one	53. then	78. now
4. a	29. had	54. she	79. people
5. to	30. not	55. many	80. my
6. in	31. but	56. some	81. made
7. is	32. what	57. so	82. over
8. you	33. all	58. these	83. did
9. that	34. were	59. would	84. down
10. it	35. when	60. other	85. only
11. he	36. we	61. into	86. way
12. for	37. there	62. has	87. find
13. was	38. can	63. more	88. use
14. on	39. an	64. her	89. may
15. are	40. your	65. two	90. water
16. as	41. which	66. like	91. long
17. with	42. their	67. him	92. little
18. his	43. said	68. see	93. very
19. they	44. if	69. time	94. after
20. at	45. do	70. could	95. called
21. be	46. will	71. no	96. words
22. this	47. each	72. make	97. just
23. from	48. about	73. than	98. where
24. I	49. how	74. first	99. most
25. have	50. up	75. been	100. know

Appendix C: Description of Decodability Levels

Level	Pattern	Excludes	Example
1	A, I		A, I
	C-V		me, we, be, he, my, by, so, go, no
2	C-V-C	No words ending in R or L	man, cat, hot
	V-C		am, an, as, at, ax, if, in, is, it, of, on, ox, up, us
3	C-C-V		she, the, who, why, cry, dry
	V-C-C-[C]	No words ending in R or L	ash, itch
	C-C-[C]-V-C	r-C or l-C (e.g., fort, mild) or V-gh (e.g., sigh)	that, chat, brat, scrap
	C-V-C-C-[C]		back, mash, catch
	C-C-[C]-V-C-C-[C]		crash, track, scratch
4	[C]-[C]-[C]-V-C-e		bake, ride, mile, plate, strike, ate
5	C-[C]-V-V-[C]-[C]	No words ending in -gh (e.g., laugh, through, though)	beat, tree, say, paid
	V-V-C-[C]		eat, each
6	C-[C]-V-r		car, scar, fir
	[C]-[C]-V-r-C		farm, start, art, arm
	[C]-[C]-V-ll		all, ball, shall, tell, will
	C-[C]-V-l-C		told, child
	C-[C]-V-V-l-C		could, should, field, build
7	Dipthongs		boy, oil, draw, cloud
8	Multisyllabic words		dinosaur, petulant

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About CIERA

The Center for the Improvement of Early Reading Achievement (CIERA) is the national center for research on early reading and represents a consortium of educators in five universities (University of Michigan, University of Virginia, and Michigan State University with University of Southern California and University of Minnesota), teacher educators, teachers, publishers of texts, tests, and technology, professional organizations, and schools and school districts across the United States. CIERA is supported under the Educational Research and Development Centers Program, PR/Award Number R305R70004, as administered by the Office of Educational Research and Improvement, U.S. Department of Education.

Mission. CIERA's mission is to improve the reading achievement of America's children by generating and disseminating theoretical, empirical, and practical solutions to persistent problems in the learning and teaching of beginning reading.

CIERA Research Model

The model that underlies CIERA's efforts acknowledges many influences on children's reading acquisition. The multiple influences on children's early reading acquisition can be represented in three successive layers, each yielding an area of inquiry of the CIERA scope of work. These three areas of inquiry each present a set of persistent problems in the learning and teaching of beginning reading:

CIERA INQUIRY 1
Readers and Texts

Characteristics of readers and texts and their relationship to early reading achievement. What are the characteristics of readers and texts that have the greatest influence on early success in reading? How can children's existing knowledge and classroom environments enhance the factors that make for success?

CIERA INQUIRY 2
Home and School

Home and school effects on early reading achievment. How do the contexts of homes, communities, classrooms, and schools support high levels of reading achievement among primary-level children? How can these contexts be enhanced to ensure high levels of reading achievement for all children?

CIERA INQUIRY 3
Policy and Profession

Policy and professional effects on early reading achievement. How can new teachers be initiated into the profession and experienced teachers be provided with the knowledge and dispositions to teach young children to read well? How do policies at all levels support or detract from providing all children with access to high levels of reading instruction?

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